MONTANA MEAT PROCESSORS ASSOCIATION

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"CLEAN LABELS"

- Trends that ensure the labels of food products are shorter, cleaner, natural looking labels.
- Based on Consumer Perception
- Easily recognizable, negative connotation-free ingredients
- Free from "Chemical Sounding" names
- The problem: there isn't a standard for what constitutes a clean label
- Many studies have been completed on this topic to include consumer preference studies, eye catching label terms, among others

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"CLEAN LABELS"

To Continue….

- Natural ingredients – nothing artificial in the ingredients
- Simplicity – easily recognizable ingredients, not too many ingredients
- Include ethically sourced or grown ingredients
- Transparency – not only about ingredients, but transparent package as well
- Promise of freshness
- Minimal processing

- Probably not going away soon – Millennials and Gen Z-ers are growing more and more cognizant of what they consume

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What are top concerns?

Millennials

Amount of sugar
All-natural
Amount of protein
Sodium levels
Free from preservatives

Of the three generations, millennials are most concerned with products that are gluten-free, Fair Trade and vegan.

Generation X

On sale
All-natural
Amount of sugar
Hormone-free
Trans fats

Of the three generations, Gen Xers are least concerned with ingredients and additives, and most likely to fall in the "Not Bothered" category.

Baby Boomers

Amount of sugar
Sodium levels
Trans fats
Contains artificial sweeteners
High-fructose corn syrup

Of the three generations, boomers are most likely to report that sugar and fat levels influence what they buy.

www.crresearch.com

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HOW MUCH DO LABELS MATTER?

- The same study from the previous slide identified that 69% of people have their shopping habits impacted by reading the labels of products they pick up.
- Additionally, at least one in 4 people regularly read labels, looking for specific ingredients in almost all the foods they buy.
- Another study identified that consumers are 76% more likely to purchase products with ingredients they understand, know, and trust.

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THE CONUNDRUM

Consumers want cleaner looking labels, but they don't fully know what that means

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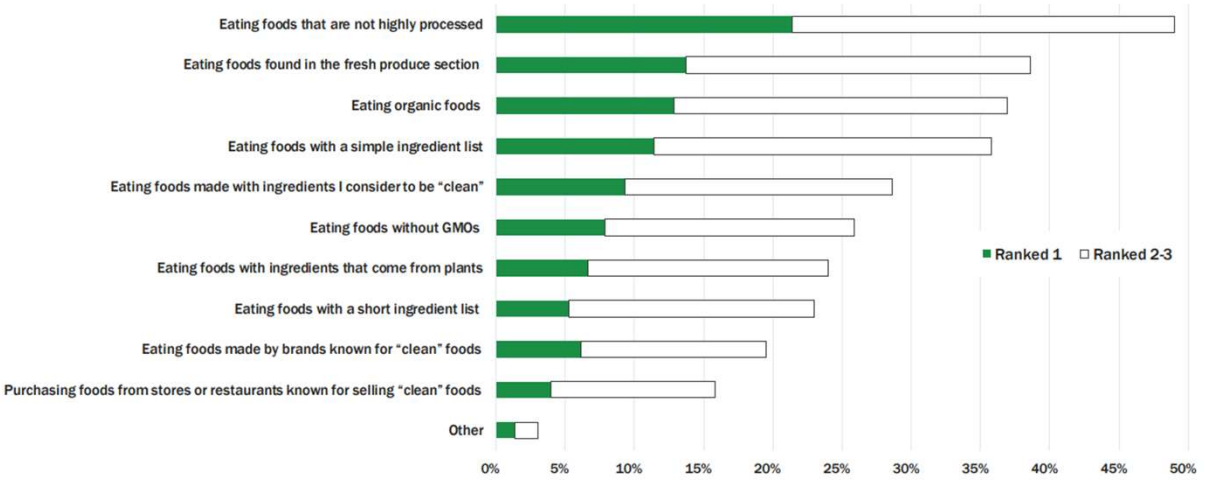
Nearly half of "clean eaters" define the term as eating foods that are not highly processed; fresh produce, organic, simple ingredient lists also rank high



[If somewhat/strongly agree to 4B] You mentioned that you consider yourself to be a "clean eater". What does being a "clean eater" mean to you? Rank your top three responses. *n=453*

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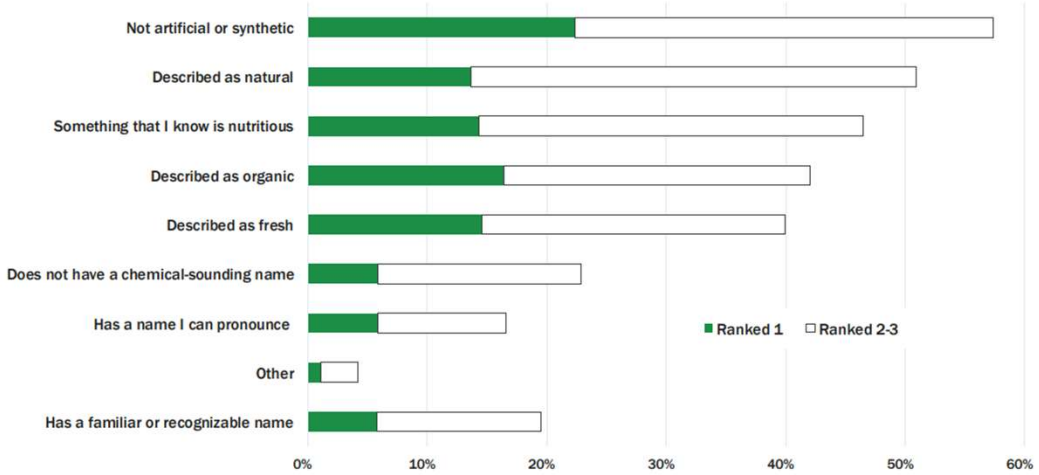
Of those who seek out foods and beverages with "clean" ingredients, the most highly ranked definition for this term is, "not artificial or synthetic"



[If somewhat/strongly agree to 4D and/or 4E and/or select 5J] You mentioned that you try to choose foods and beverages with dean ingredients. How would you define a "clean" ingredient? Rank your top three. *n=670. Sample size includes those who try to choose foods and beverages with clean ingredients when shopping in-person and online (slide 6) and those who eat foods made with ingredients they consider to be "clean" (slide 7).*

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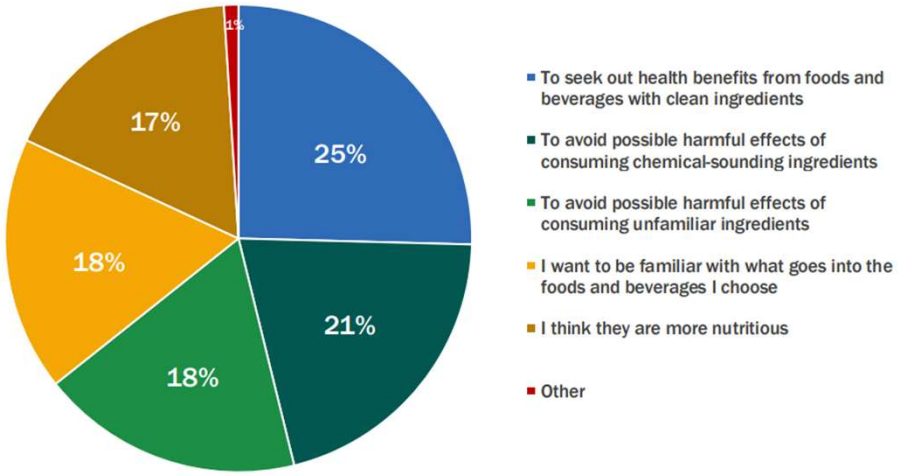
Seeking out health benefits is top motivator for choosing foods and beverages with clean ingredients



[If somewhat/strongly agree to 4D and/or 4E and/or select 5J] Why do you try to choose foods and beverages with clean ingredients? Select your top response. *n=670*

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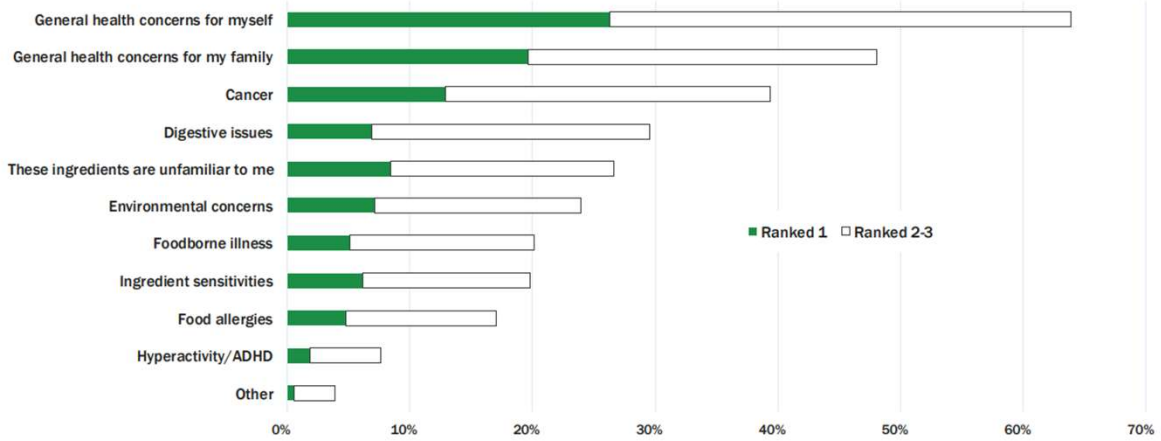
Top reasons for avoiding chemical-sounding ingredients are general health concerns for self and family



[If somewhat/strongly agree to 4F] You mentioned that you try to avoid buying foods or beverages with chemical-sounding ingredients. What, specifically, concerns you about these ingredients? Rank your top three concerns. *n=590*

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Canadian Research Reports:
Another study supporting the same thing we have been discussing.

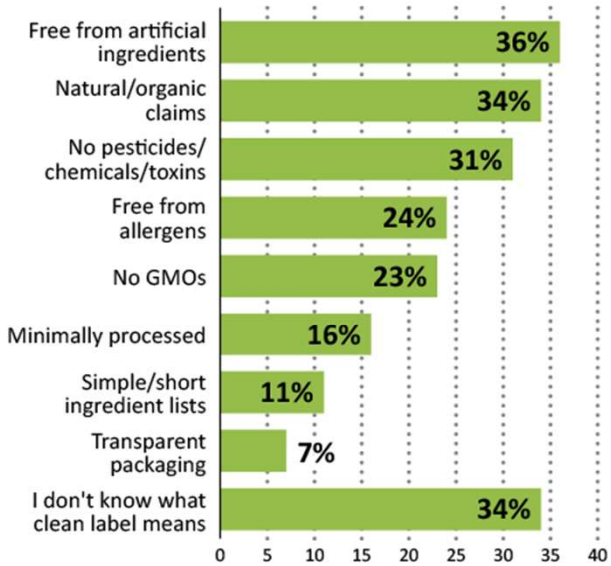

FIG. 1. Global survey: What does the term "clean label" mean to you?

Credit: Canadean Ltd. Research Reports, Q4 global consumer survey, 2015.

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LACK OF DIRECTION

- Without direction from regulation, companies and processors are tasked with coming up with their own standards of what clean labels mean:
  - Ex: Chipotle, Whole Foods, Panera Bread, etc.

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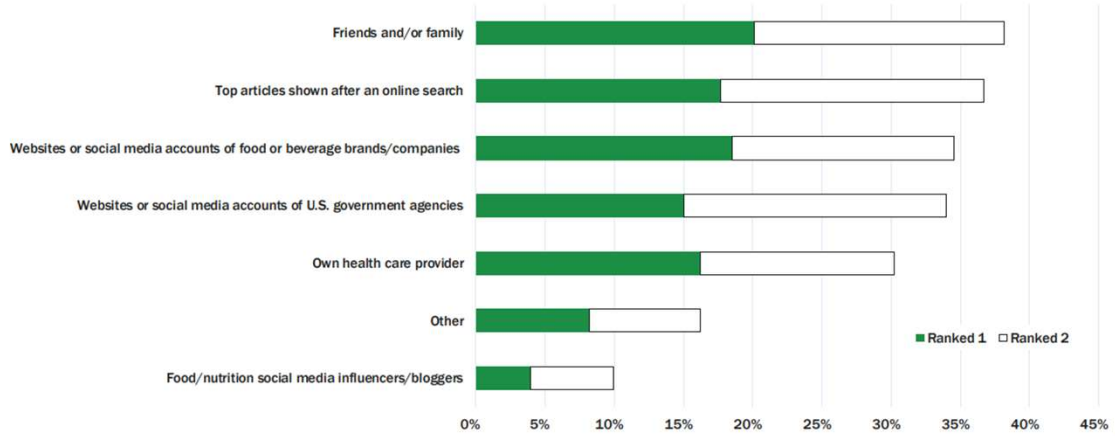
When looking for information about specific food ingredients, friends/family and online searches are most likely sources



Generally, if you were looking for information about specific ingredients found in foods or beverages, which of these would you be most likely to use as an information source? Rank your top two.
n=1054

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International Food Information Council

- Food-Ingredients-LSI-Survey.May-2021.pdf (foodinsight.org)

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INGREDIENT SUBSTITUTION

Non-Clean-Label Ingredients	Possible Clean-Label Alternatives
Artificial preservatives (e.g., TBHQ, sodium lactate, EDTA)	Botanical extracts (e.g., green tea, rosemary, citrus, chamomile, acerola cherry); tocopherols (can be labeled "vitamin E")
Emulsifiers (e.g., Mono- and diglycerides, sodium stearoyl lactylate, polysorbate 80)	Pea, faba, or lentil bean protein; Q-Naturale; phospholipids; egg yolk
Malic acid (natural flavor)	Apple juice concentrate
Texturizing and thickening agents (e.g., modified starches, hydrocolloids)	Blends of native starches (e.g., corn and tapioca); pea protein and native starch; rice flour; citrus fibers
Sodium phosphates (processed meats)	Rice starch; citrus fibers; soy protein; yeast extract; plum puree
Solvent-extracted vegetable oils	Expeller- or cold-pressed vegetable oils

- Clean label: the next generation (aocs.org)

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INGREDIENT SUBSTITUTION

- Examples of ingredients with negative connotation:
  - Monosodium Glutamate
  - High Fructose Corn Syrup
  - Aspartame
  - Nitrites/Nitrates
  - Soy Lecithin
  - Artificial coloring/flavors

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RENAMING

- Easy way to pacify consumers – list the common name in ingredients – less scary
- Examples:
  - Changing "Sodium Bicarbonate" to "Baking Soda"
    - More familiar to consumers
  - Oxidane – it's WATER
  - Sodium Chloride – Salt
  - Sucrose - Sugar

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PRODUCTION METHODS

Some consumers identify Conventional Agriculture (feedlots, monoculture, etc.) as less natural.

Some consumers identify some ingredients as unhealthy or unfamiliar

"If you can't pronounce it, it isn't good for you"

"If there are more than four syllables in the ingredient, don't eat it"

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ORGANIC AND OTHER PRODUCTION METHODS

- Organic production must meet USDA's Certified Organic criteria.
- Organic spices - often difficult to source and cost more
  - Can be lower in flavor
  - Typically steam treated to reduce contamination, not as effective as the irradiation or ethylene oxide treatments normally used.
  - Often contain a higher micro load – reduces shelf life
  - Color can fade rapidly
- The USDA Standards of Identity can be helpful by improving label appeal. Ex: in Italian sausage rather than labeling "spices," the spices can be listed separately, i.e., fennel, anise, oregano, etc. This looks more authentic.
- Transparency is the one consumer trend that will have an impact on the future of meat protein. Due to the nature of commodity handling and co-mingling of meat from different farms, transparency can be difficult to achieve on a large scale – Except COOL Labeling.
- Gluten free – substituting traditional wheat-based products with others.

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LESS SATURATED FAT

- Retail Cuts with Less Fat
- Chopped and formed products made with leaner proteins to result in less fat in the product
- Exception: Bacon! – Seen as more of a treat, not a food product that is consumed every day.
  - Most want more fat for more flavor

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LESS SODIUM

- Trending diets place an emphasis on less salt in the products that consumers eat
- Before removing salt from formulations, consider the functional attributes of salt:
  - flavor enhancement
  - extracting the natural soluble meat protein:
    - helps bind ground products,
    - antimicrobial protection,
    - preservation,
    - water retention
- Potassium chloride can be used as a salt substitute.
  - There is a limit to how much salt can be replaced with it due to a metallic or bitter type flavor.
    - Only a portion (10-30%) of the salt can be replaced before off flavors are detected.

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MONOSODIUM GLUTAMATE

- Flavor that was originally obtained from seaweed, but now mainly made from bean and cereal protein
- Because of heightened negative perception of MSG, hydrolyzed vegetable proteins and autolyzed yeast extracts were widely used in the past to replace MSG effectively. But today's consumers no longer want to see HVPs and AYEs on labels either.
- Natural flavors are now introduced to clean up the label and still provide flavor.
- Considered GRAS by FDA

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PHOSPHATES

- Traditionally used to most effectively enhance moisture retention.
- Sodium phosphates are highly functional in binding water in meat products, no cost-effective replacement that performs equally.
- Consumers may perceive "phosphate" as chemical sounding name and not prefer it.
  - Replacements: mustard, corn syrup solids, sugars, starches, carrageenan, soy protein, fibers, etc. Unfortunately, some of these ingredients are not completely water soluble and may also negatively impact texture or mask other flavors.

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ARTIFICIAL FLAVORS

- Blanket term that refers to man-made chemicals created to taste the same as natural flavors.
- Often associated with processed or “unnatural” products in the mind of the consumer.
- Artificial flavors typically survive the cooking process much better than natural flavors and generally have a significantly lower cost-in-use.
- Many artificial flavors cannot easily be replaced with a natural version. Natural flavors tend to be higher in cost, and typically require increased usage partially due to the high level of natural flavor that flashes off when the meat is cooked but may have other side effects (cookout purge, texture changes, and savory flavor masking).
- Natural flavors – broadly defined by FDA – and flavor isolated from natural sources.
  - Artificial flavor – not defined as such, even if chemical composition is the same.

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INTERESTING SIDE NOTE

- How are artificial flavors developed?
  - Prepared by highly trained professionals known as flavorists or flavor chemists.
    - Must go through 7 year apprenticeship before becoming certified by the Society of Flavor Chemists
    - Estimated to be 500 people certified worldwide

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CORN SYRUP SOLIDS

- This ingredient is very good at helping to maintain moisture in sausage and provides only a mild sweetness
- Alternate water binders (where allowed per USDA regulation) can also be substituted for corn syrup solids, but may have other side effects (purge, texture and savory flavor masking).

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SODIUM NITRITE

- Keeps meat pink after cooking, aids in flavor, shelf life, color, etc.
- To take sodium nitrite off labels, “natural” curing agents, such as celery juice concentrates, were developed.
  - Consumer perception is that this is healthier. The truth: there is really only one reaction that will cure meat, and it starts with sodium nitrite. These natural curing agents are designed to provide high levels of nitrite created by “natural” methods, including natural microbial fermentation. The difference is sodium nitrite does not appear on the label when natural curing agents are used. These natural curing agents also typically require extended curing time as well, compared to traditional curing.
- AAMP has brochure style information that processors can provide to their consumers

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ANTIBIOTICS

- It's a misconception that antibiotics can be found in meat products available at retail and foodservice.
- Reality: livestock are taken off antibiotics well in advance of harvest. The USDA has allowed some meat, such as chicken, to contain statements such as "No antibiotics" on their labels, but beef and pork products do not have these on the label.
- By federal law, all meat and poultry products sold in the U.S. are free of antibiotic residues.

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Means that the "product does not contain artificial flavors, colorings, chemical preservatives or other synthetic ingredients."

Additional statement must be on the label to explain

"no artificial ingredients, minimally processed"

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Nutrition Facts

8 servings per container
Serving size 1 slice (59g)

Amount per serving
Calories 180

	% Daily Value*
Total Fat 6g	8%
Saturated Fat 4g	20%
Trans Fat 0g	
Cholesterol 25mg	8%
Sodium 190mg	8%
Total Carbohydrate 30g	11%
Dietary Fiber 1g	4%
Total Sugars 15g	
Includes 14g Added Sugars	28%
Protein 3g	
Vitamin D 0mcg	0%
Calcium 55mg	4%
Iron 2mg	10%
Potassium 1750mg	35%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet.

ADDED SUGARS

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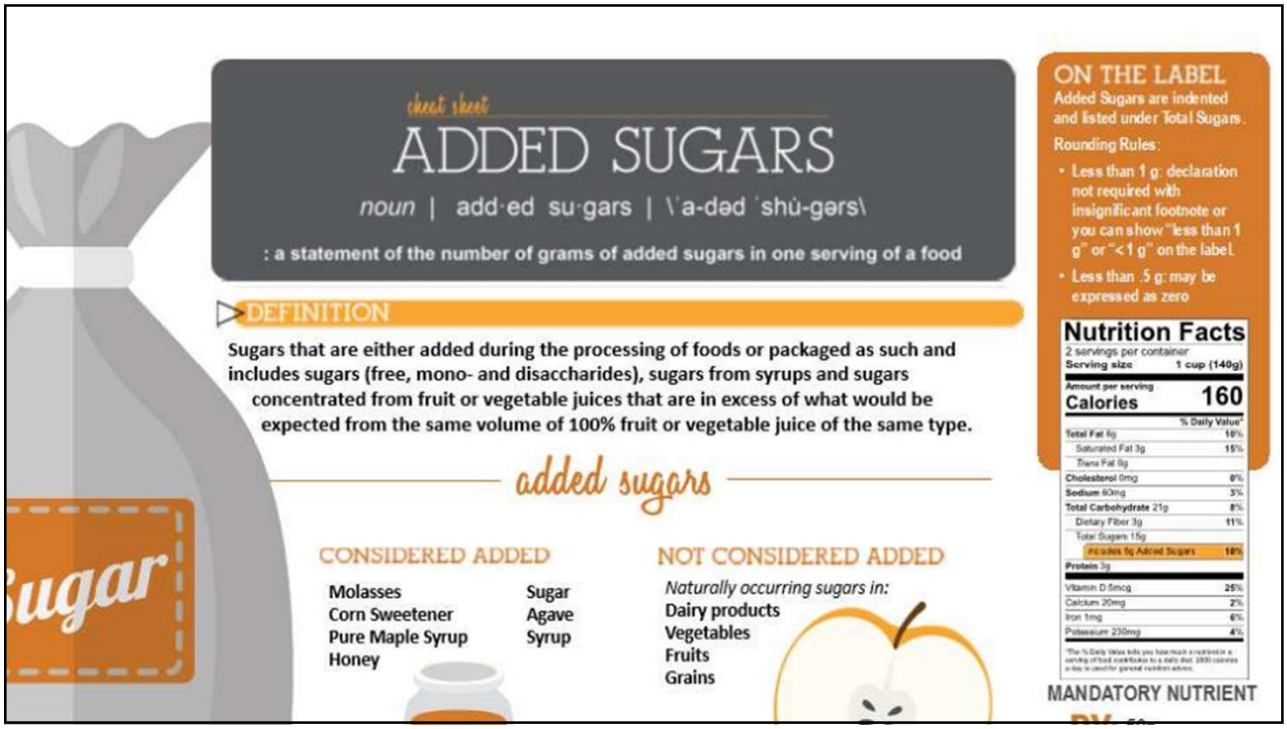

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DRINKS

- Sodas and other beverages tend to get overlooked with the clean label trend.

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SO WHAT'S THE ANSWER TO MOVE FORWARD WITH THIS CLEAN LABEL TREND?

- Seems there is a lot of negatives that go into traditional processing
- Best answer: educate the public
  - Explain ingredients aren't placed in product for fun, to get consumers sick, etc. It is to make a flavorful, delicious, good looking product with great mouth feel
- Rename ingredients – be truthful but use the less scary name
- Throwing it out to you: what are your thoughts?

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BIGGEST TAKEAWAY

AAMP is here to help!

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QUESTION TIME!

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- http://
- tinyurl.com/generationclean.

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